



Week ending July 12, 2008

Countdown to Pad Abort-1 is 152 Days

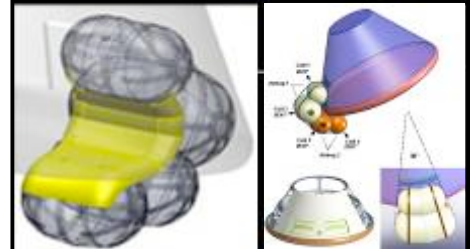


The Landing and Recovery System Advanced Development Project and its air bag contractors, ILC Dover and Airborne Systems, completed the Nominal Land Landing (NLL) assessment, design and preliminary optimization of the NLL air bag system.

The NLL air bags are an extension of the wrap-around air bags designed for off-nominal land landing, but utilize slightly larger air bags to accommodate the greater dispersions in landing conditions expected for NLL. Fabrication of the prototype air bag began and is scheduled for completion in late July. The photo far right shows the prototype airbag assembly. The prototype assembly will be installed on a test fixture at the factory and deployed in a series of demonstrations designed to demonstrate the packaging, deployment and inflation of the wrap around airbags, prior to testing at Langley Research Center.



The CEV Displays and Controls (D&C) Team completed the development of several prototype display unit bezels to evaluate edge key size, spacing, and force requirements both with and without pressurized gloves (Photos near right). The baseline design currently has 26 edge keys, but the rapid prototyping team has identified a need for 36 edge keys and a rotary item selection knob. The NASA human engineering team conducted early engineering runs in the Building 7 glove box, and began testing of crew subjects.



The CEV Parachute Assembly System (CPAS) team continues to review and approve final Cluster Development Test 2 (CDT-2) test configuration details and procedures. CDT-2 is on track for a test date of July 29.

Upcoming Milestones

July 29-30 CPAS Cluster Development Test-2
August 12-15 Pad Abort-1 Forward Bay Cover (FBC) jettison actuator development testing
August 29 Pad Abort-1 FBC jettison actuator flight unit delivery

White Sands Missile Range (WSMR) Test Facilities work continued on electrical panel installation and communications installation at the Launch Pad and the Launch Services Pad Area. The concrete pour for the 12-inch thick concrete drive-up pad adjacent to the 12-inch thick concrete apron for the SR-118 break-over fixture and the crane positioning and primary stacking areas, is complete.

Construction continues in the Operations & Checkout (O&C) facility at KSC on pace to meet schedule milestones:

- All electrical primary distribution cabling was installed.
- Lockheed Martin Intranet capability within the O&C building is operational.
- Air-Lock wall structural steel erection is on schedule.
- Roof refurbishment continues on schedule. High Bay roof area is "dried in". Final membrane to be installed after completion of Low Bay roof. Low Bay roof area is in process of "dry in".

An overview and tour of the Orion O&C highbay facility at KSC was provided for Constellation Program Manager Jeff Hanley and Kennedy Space Center Director Bill Parsons.

Construction continues in the Michoud Assembly Facility in support of Orion Production:

Universal Weld System #2 Site Preparation:

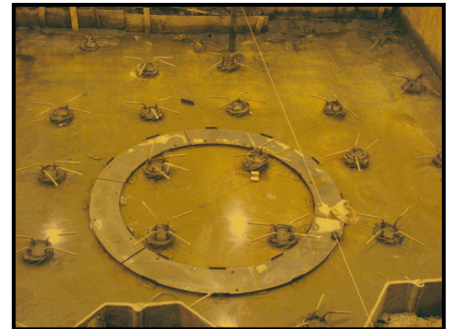
- Foundation forms and rebar configuration progressing on schedule.
 - Rail Pit Foundation Bottom Mat in work (Photo right).
 - T-Slot Foundation Forms in work
 - Installed turn table anchor plate.

Universal Weld System #2:

- Tooling currently in production at MTS Manufacturing Plant.

Tooling Relocation:

- Power installation for newly installed crane rails currently in work
- Progressing with fencing and electrical utility installation



Deputy Project Manager Mark Kirasich and Lockheed Martin Orion Program Deputy Larry Price gave a Constellation and Orion update to the members of the Colorado Space Coalition (CSC) in Denver, Colorado on July 11. The CSC is a group of industry stakeholders working to make Colorado a center of excellence for aerospace. CSC members – including space companies, military leaders, academic organizations, research centers, and economic development groups – promote Colorado's significant space assets as well as advancing legislation vital to industry growth and success.

The interview with Greg Avery of the *DENVER BUSINESS JOURNAL* with Lockheed Martin Orion Deputy Program Manager Larry Price and NASA Orion Project Deputy Manager Mark Kirasich is scheduled to run Friday, July 18. The interview provided a general overview and update on the Constellation Program and Orion project as well as the positive impact the space program has on the state of Colorado. The *Journal* story will also include photos of the Exploration Development Lab in Waterton, Colorado.